

## Product datasheet for **AP06146PU-N**

### Glycogen synthase 1 (GYS1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 500-550 of Human GYS.
Specificity:	This antibody detects endogenous levels of Glycogen Synthase protein. (region surrounding Pro539)
Formulation:	PBS, pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% by SDS-PAGE) Preservative: 15 mM Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 84 kDa
Gene Name:	glycogen synthase 1
Database Link:	<a href="#">Entrez Gene 2997 Human P13807</a>



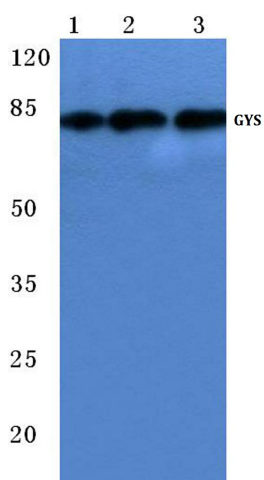
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**Background:**

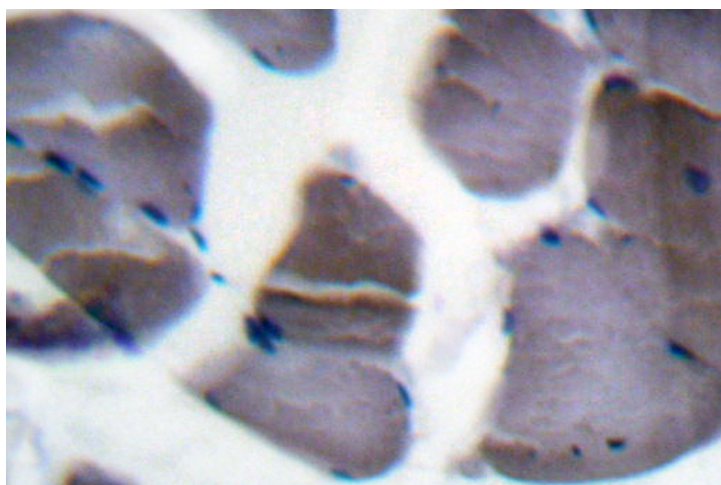
Glycogen (starch) synthase belongs to the mammalian/fungal glycogen synthase family of proteins. Two forms of this protein exist, a liver form and a muscle form, both of which have the same function in the glycogen biosynthesis pathway. Glycogen synthase transfers the glycosyl residue from UDP-glucose to the nonreducing end of  $\alpha$ -1,4-glucan. The 81 kDa liver glycogen synthase protein is truncated by 34 amino acids compared to the muscle form. However, these enzymes differ significantly in their amino- and carboxyl-terminal regions. Muscle glycogen synthase serves to fuel muscular activity only and is regulated by muscle contraction and by catecholamines. Liver glycogen synthase mediates blood glucose homeostasis in response to nutritional cues. Defects in the gene encoding liver glycogen synthase results in glycogen storage disease type 0 (GSD0), a rare form of fasting ketotic hypoglycemia.

**Synonyms:**

GYS1, GYS

**Product images:**

Western blot (WB) analysis of GYS antibody at 1/500 dilution Lane 1:HEK293T whole cell lysate Lane 2:HepG2 whole cell lysate Lane 3:Mouse liver tissue lysate



Immunohistochemistry (IHC) analysis of GYS antibody on paraffin-embedded sections.